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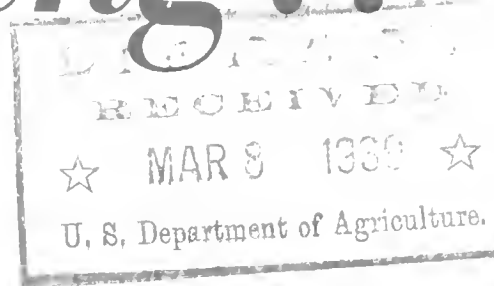
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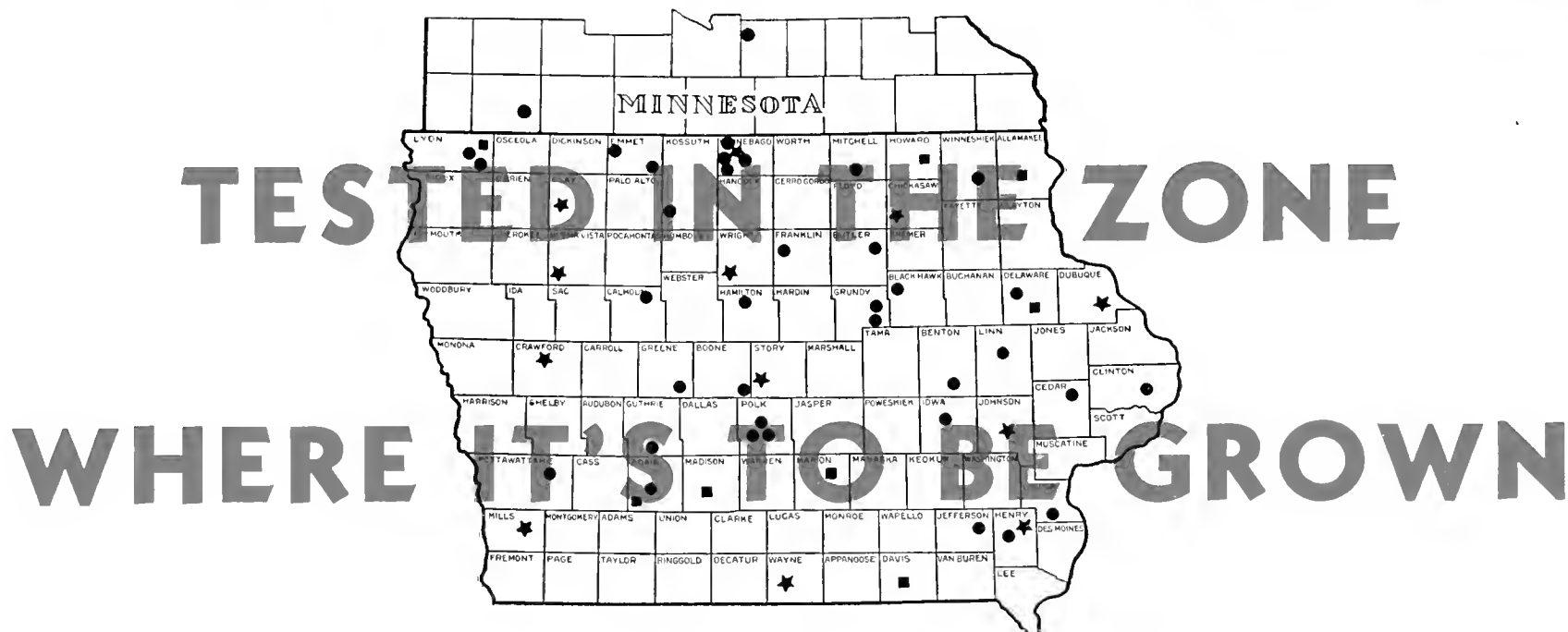
# .. Announcing ..

## 1938



# PIONEER HI-BREDS

## PIONEER HI-BRED SEED CORN



### ALL PIONEER HI-BREDS CAREFULLY TESTED

The Pioneer Hi-Bred Corn Company carries on complete, scientific yield test projects for testing the yield, lodging, and maturity of Pioneer crosses before they are placed on the market. Fifty-five Pioneer test plots are scattered throughout Iowa, with additional test fields in Minnesota, Illinois, Indiana, and Ohio.

Pioneer Hi-Breds tested for yield, lodging and maturity are planted, harvested, and computed with the same accurate methods as are used in the "Iowa Corn Yield Test." In spite of the superiority of Pioneer Hi-Bred Seed Corn, our breeders persistently carry on endless research for still better seed.

Unless our hybrids make, in several years of testing, a high average record in many different locations, they never reach our customers. All Pioneer Hi-Bred crosses undergo a series of rigorous tests for a period of three and four years to determine their superiority over present commercial hybrids.

After an experimental cross has proved itself consistently superior over our present commercial hybrids, it is then produced on a large scale and offered for sale.

### PIONEER HI-BREDS FOR 1938

We are pleased to announce the development of several new and improved Pioneer Hi-Breds which, in years of testing, have demonstrated their superior quality and performance.

To acquaint you with these crosses, a brief outline of each new Pioneer Hi-Bred is listed, together with our older lines, under the territory for which it is best adapted.

The maps on page three will aid you in determining which crosses are adapted to your community. It is true that unusual seasons sometime cause our hybrids to do well in territories where they are not recommended. Nevertheless, it is wise to assume normal weather, and order corn for your locality as indicated on the maps.

Farmers making late plantings, or planting on wet, cold soil, should use a hybrid of earlier maturity than the one recommended for their territory. On the other hand, farmers planting early on rich soil can often get good results by using later maturing hybrids farther north than is recommended.

# PIONEER HI-BREDS FOR NORTHERN IOWA AND SOUTHERN MINNESOTA

**1.\* PIONEER HI-BRED 355.** This hybrid, through a number of years, has demonstrated itself a faithful standby in Southern Minnesota and Northern Iowa where early maturity is of prime importance. Its period of maturity is the same as open-pollinated varieties grown in this region. But, of course, in yield and all around quality, the hybrid surpasses by far the open-pollinated corn.

The ears on this Pioneer Hi-Bred are longer than those of open-pollinated strains, and strong shanks keep the ears from dropping off the stalks.

Because of strong roots and stiff stalks, Pioneer 355 excels in lodging performance, standing up extremely well under bad weather conditions. This ability to stand up makes it easier to husk.

**2. PIONEER HI-BRED 357.** The consistently high yield, extra early maturity, strong roots, sturdy stalks, and leafy appearance are the outstanding characteristics of this cross. Its heavy foliage stamps it as a superior stock in Northern Iowa where corn leafage is usually scanty.

The early maturity and yielding ability of Pioneer 357 received special mention in the 1936 "Iowa Corn Yield Test"

report which stated, "One of the difficulties in obtaining a satisfactory hybrid for northern Iowa is to find one sufficiently early to escape damage in a short growing season and yet able to make a satisfactory yield as compared with later hybrids in longer growing seasons. Pioneer Hi-Bred 357, on the basis of 2 years, had a relative moisture percentage of 89.0 and yielded 12.1 per cent more than the open-pollinated corn". This cross is not more than three days later in maturity than Pioneer 355.

Pioneer 357 is the outstanding practical hybrid for extreme Northern Iowa and Southern Minnesota where early maturity, sound yield, and strong shanks are important.

**3. PIONEER HI-BRED 335.** In a normal year, Pioneer Hi-Bred 335 matures a little late in the extreme northern tier of Iowa counties. Its best region is along the second row of counties down from the Minnesota border.

In appearance this cross is a broad leafed looking strain, having heavy, stiff stalks, low ears, high yield, low moisture content at harvest time, and strong shanks.

## NEW PIONEER HI-BRED CROSSES COMPARED WITH OLDER PIONEER HI-BRED CROSSES AND OPEN POLLINATED CORN IN OUR OWN EXTENSIVE YIELD TESTS

Average Results for 1934-1935-1936

### FOR NORTHERN IOWA AND SOUTHERN MINNESOTA

Pioneer Hi-Bred No.	Average Bu. Per Acre	Increased Yield Per Acre Over O. P.	Percentage Improvement of New Hybrids Compared to Open Pollinated (O. P.) Corn					Approximate Maturity No. of Days	Outstanding for Cold Resistance
			Yield % of O. P.	Stand % of Ave.	Moisture % of O. P.	Ear Height % of O. P.	*Lodging % of O. P.		
335 -----	56.6	15.9 Bu.	140	109	114	108	49	103	—✓
357 -----	52.1	11.4 “	128	107	99	71	65	93	
* 355 -----	48.4	7.7 “	119	101	97	98	65	90	—✓
Open Pollinated	40.7		100	88	100	100	100		

### FOR NORTH CENTRAL IOWA

Pioneer Hi-Bred No.	Average Bu. Per Acre	Increased Yield Per Acre Over O. P.	Yield % of O. P.	Stand % of Ave.	Moisture % of O. P.	Ear Height % of O. P.	*Lodging % of O. P.	Approximate Maturity No. of Days	Outstanding for Cold Resistance
315 .....	62.2	20.1 Bu.	148	109	102	97	77	107	—✓
322 .....	60.9	18.8 "	148	103	104	94	59	105	
* 323 .....	56.6	14.5 "	131	107	101	98	81	105	—✓
Open Pollinated	42.1		100	91	100	100	100		

### FOR SOUTH CENTRAL IOWA

Pioneer Hi-Bred No.	Average Bu. Per Acre	Increased Yield Per Acre Over O. P.	Yield % of O. P.	Stand % of Ave.	Moisture % of O. P.	Ear Height % of O. P.	*Lodging % of O. P.	Approximate Maturity No. of Days	Outstanding for Cold Resistance
308 .....	62.5	18.1 Bu.	142	102	100	100	91	120	
314 .....	61.1	16.7 "	138	107	96	97	68	118	—✓
307 .....	60.8	16.4 "	137	107	98	97	58	120	—✓
315 .....	59.2	14.8 "	133	108	91	99	69	107	—✓
308-D .....	56.6	12.2 "	125	102	99	101	60	120	
* 311-A .....	53.7	9.3 "	121	103	91	93	80	110	
* 311 .....	53.2	8.8 "	119	98	94	98	65	110	
Open Pollinated	44.4		100	95	100	100	100		

### FOR SOUTHERN IOWA AND NORTHERN MISSOURI

Pioneer Hi-Bred No.	Average Bu. Per Acre	Increased Yield Per Acre Over O. P.	Yield % of O. P.	Stand % of Ave.	Moisture % of O. P.	Ear Height % of O. P.	*Lodging % of O. P.	Approximate Maturity No. of Days	Outstanding for Cold Resistance
305-A .....	53.9	19.0 Bu.	167	109	124	97	75	125	
314 .....	52.8	17.9 "	152	102	98	92	64	118	—✓
307 .....	51.9	17.0 "	150	102	99	95	63	120	—✓
308 .....	50.6	15.7 "	150	102	104	100	75	120	
308-D .....	49.8	14.9 "	144	103	98	97	60	120	
* 306 .....	43.7	8.8 "	125	101	101	100	83		
* 311 .....	42.5	7.6 "	120	102	94	96	64	110	
* 311-A .....	41.8	6.9 "	120	104	96	92	71	110	
Open Pollinated	34.9		100	92	100	100	100		

A quantity of each of above crosses except No. 306 are in production for 1938 planting.

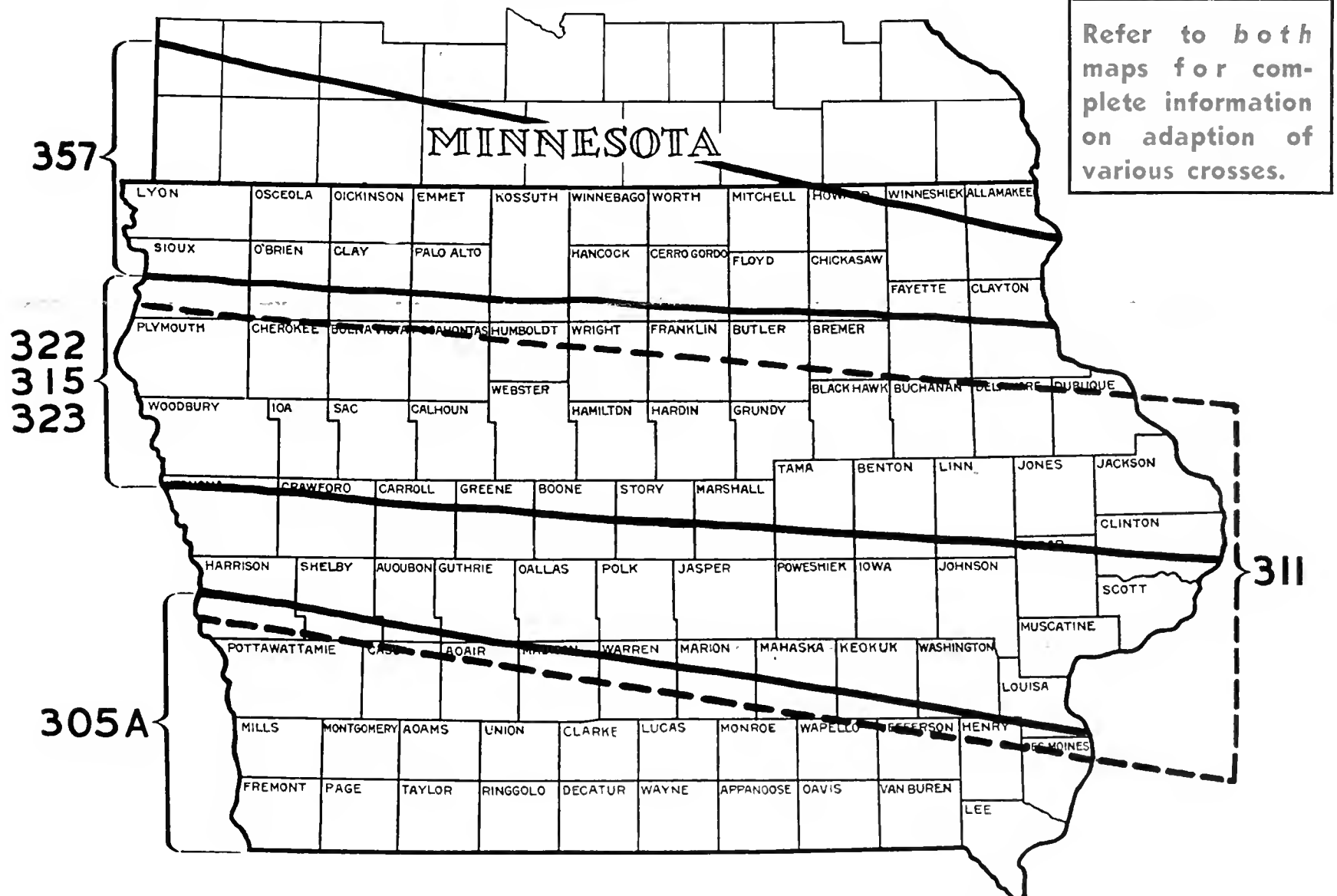
\*Figures in lodging column indicate the relative strength of stalks and heaviness of root systems. The lower the figure the better it is.

\* Older line of Pioneer Hybrids.

# SHOWING SECTIONS WHERE PIONEER HI-BRED CROSSES ARE ADAPTED IN MATURITY



The outlines of territories for each Pioneer Hi-Bred are the general boundaries for that particular cross. A hybrid planted at or near its boundary will do well during a normal year, but in abnormal seasons it may be a little early or late depending upon the type of season.



Refer to both maps for complete information on adaption of various crosses.

**PIONEER—FROM FIELD TO FIELD IT'S HIGHER IN YIELD**

## NORTH CENTRAL IOWA PIONEER HI-BREDS

1. **PIONEER HI-BRED 322.** Pioneer Hi-Bred 322 yielded, in one of the worst drought seasons in the history of the corn belt, 69.31 bushels per acre in the 1936 "Iowa Corn Yield Test." This was the *highest* yield in any of the twelve 1936 Yield Test districts for both the regular hybrid and open pollinated divisions.

In the 1936 drought stricken fields, Pioneer 322 exhibited its ability to maintain good appearance even in adverse conditions, looking very dressy, throughout the dry spell, in its deep green foliage.

This Pioneer hybrid proves to be an outstanding seed for the North Central territory. While going through three years of rigid testing, it showed exceptionally high all around quality.

With the advantage of strong roots, and sturdy stalks, it stands up excellently under storm and drought conditions.

2. **PIONEER HI-BRED 315.** Yielding 124 per cent of the average of open pollinated corn, Pioneer 315 holds, in North Central Iowa, first place honors in yield for all hybrids having a two year average or over in the "Iowa Corn Yield Test."

The Agricultural Experiment Station at Ames described it in the 1936 "Iowa Corn Yield Test" as "one of the outstanding combinations" having excellent performance records for yield and lodging resistance.

Two other distinct features of the cross are its high germinating quality and strong shanks which prevent ear droppage. "Cold and wet" germination tests show that it has unusually good resistance against cold, wet, planting conditions.

3. **\*PIONEER HI-BRED 323.** A winner of the Banner Trophy for highest yielding corn in the Iowa Corn Yield Test, Pioneer 323 has an average yield increase of 14.5 bushels per acre over open-pollinated corn in our three year yield test taken in 1934, 1935, and 1936.

It has medium sized ears, exceptionally strong shanks, loose husks, and is unusually easy to pick by hand.

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## SOUTH CENTRAL AND SOUTHERN IOWA PIONEER HI-BREDS

1. **PIONEER HI-BRED 307.** While going through four years of rigid preliminary testing, this hybrid stood up well in all weather conditions and demonstrated superior yielding ability. In a three year yield performance test Pioneer 307 had an increased yield of 16.4 bushels per acre over open-pollinated corn tested under the same conditions, and in the 1936 "Iowa Corn Yield Test," it ranked among the top yielding hybrids for the South Central section.

It has sturdy roots, exceptionally strong stalks, resistance against cold, wet springs, long, firm ears with loose husks which simplify mechanical and hand picking, and a beautiful, dark green appearance.

2. **PIONEER HI-BRED 314.** This hybrid is another high yielder which made, in a four year performance test, excellent lodging records in bad weather conditions.

In a three year yield test made in the South Central Section, Pioneer 314 averaged 16.7 bushels per acre more than the average of open-pollinated corn tested under the same conditions.

Pioneer Hi-Bred 314 has an exceptionally long ear with rather loose husks which make husking easier. Its cold resistance gives a strong, even stand under cold planting conditions.

3. **PIONEER HI-BRED 308.** Pioneer 308 established, during several years of trial tests, a reputation as one of the highest yielding Pioneer hybrids on the market.

Yielding, as an average of 1935 and 1936, 137.5 per cent of open-pollinated corn in South Central Iowa and 136.1 per cent

of open-pollinated corn in the Southern section, Pioneer Hi-Bred 308 leads the hybrid division for all entries having a yield average of two years or more in the "Iowa Corn Yield Test" program.

This particular Pioneer hybrid matures a few days sooner than Pioneer 305-A, and produces large ears which stay on the stalks because of strong shanks.

4. **PIONEER HI-BRED 308-D.** The long husks which keep the ear tips from sticking out are the outstanding feature of this hybrid.

This hybrid's percentage of dropped ears is very low because of its exceptionally strong, short shanks.

Its yield record, lodging performance, and period of maturity are practically the same as Pioneer Hi-Breds 307 and 314.

The stalks tend to have two ears medium in size, softkerneled, and high in food value, making the corn excellent for feeding purposes.

5. **\*PIONEER HI-BRED 311.** Stiff, strong stalks anchored by heavy roots are the outstanding qualities of Pioneer 311.

The period of maturity is shorter than that of 311-A, and can be grown farther north as illustrated by the maps.

In yield tests conducted during 1934, 1935, and 1936, it yielded 119 per cent of the average of open-pollinated corn.

Firm, solid ears, loose husks, and strong shanks which prevent ear dropping make it easy to harvest.

6. **\*PIONEER HI-BRED 311-A.** State Corn Husking contests are held in fields of champion hybrids. That is the reason why the 1937 Iowa Corn Husking contest was held in a field of 311-A. Pioneer 311-A possesses sturdy stalks, good roots, and firm, medium sized ears which are easy to husk by hand. Its percentage of dropped ears before harvest is very small. Its high yielding ability under good conditions is due in part to the fact that it tends to have two ears to a stalk.

In the last five years, 311-A has averaged 20 per cent or more increased yield over open-pollinated corn in BOTH the South-Central and Southern sections of the Iowa Corn Yield Test. It was about 10 per cent drier than local corn and had unusually good lodging resistance.

7. **PIONEER HI-BRED 305-A.** Because of its superior quality in all characteristics, Pioneer 305-A, displaces, in the Southern Section of Iowa, the old Pioneer 306 which formerly was used in this territory.

In a three year yield test, the new hybrid performed among the top ranking yielders. It has large roots, stiff, straight stalks, cold resistance, a leafy, dark green appearance, and strong resistance against cinch bugs.

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## CONCLUSION

This year, the new hybrids are being produced on a large scale for planting in 1938. The production of Pioneer Hi-Breds 323, 311, and 311-A will be continued, since a large number of farmers have had success with these hybrids and prefer using them.

In order to test for yourself the qualities of each new cross, it might be well to divide your orders into two or three different Pioneer Hi-Breds recommended for your location. You may like one better than another, depending upon your preference for the different characteristics. You may also discover that one cross does better than another under certain weather conditions. In this case, if more than one Pioneer Hi-Bred is planted, you will get an above-average crop each year. Diversification is good business.

\*Older line of Pioneer Hybrids.

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# PIONEER HI-BRED CORN COMPANY

## DES MOINES, IOWA